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# Descriptions of a new genus and a new species of the Limacodidae (Lepidoptera) from Japan

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**Abstract** A new limacodid genus, *Isopenthocrates*, and its monobasic new species, *I. japona*, are described from Japan based on a single male taken from Mie Pref., Honshu. The new genus seems to be most closely related to *Penthocrates* Meyrick, 1934, which occurs from Sundaland to the Philippines.

Key words Penthocrates, Isopenthocrates, Isopenthocrates japona, venation, male genitalia, Japan, taxonomy.

A curious male limacodid was captured by Mr T. Mano, Aichi Pref., at Miyakawa-mura, Mie Pref., Honshu, Japan, in 1988. The moth is very small and dull, and has some similarity to members of the genus *Penthocrates* Meyrick, 1934, which occurs from Sundaland to the Philippines (Holloway *et al.*, 1987), but the venation and genitalia show that this species has no appropriate genus to accommodate it. A new genus is hereinafter described.

### Isopenthocrates gen. nov.

Type species. Isopenthocrates japona sp. nov.

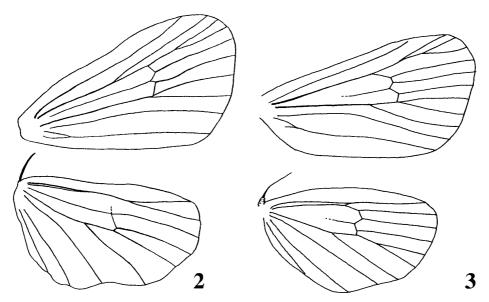
Male. Consisting of a small species, with inconspicuous maculation. Antenna filiform; proboscis normal; palpus with 2nd segment tufted, about 1.5 times as long as diameter of eye, 3rd segment short.

Venation (Fig. 2). Characterized by a reduction of veins, the homology of veins being somewhat unclear. Forewing with 10 veins, R veins reduced to four in number, M veins to two and CuA<sub>2</sub> missing; R<sub>1</sub> arising from the basal two-thirds of upper cell-vein, R<sub>2</sub> and R<sub>3</sub> stalked, and R<sub>5</sub> directly from the cell fully separated from the stalk of R<sub>2</sub> and R<sub>3</sub>; M<sub>1</sub> missing, M<sub>2</sub> curved dorsad in the basal part; M<sub>3</sub> and CuA<sub>1</sub> from the lower angle of cell. Hindwing with 9 veins, M<sub>1</sub> missing; Sc+R<sub>1</sub> long connate with upper cell-vein from the middle and stalked with Rs; M<sub>3</sub> and CuA<sub>1</sub> shortly separated, both from the lower angle of cell;



Fig. 1. Isopenthocrates japona gen. et sp. nov.,  $\delta$ , holotype. Japan, Mie Pref., Miyakawa-mura.

## A New Genus and a New Species of the Limacodidae from Japan



Figs 2-3. Wing venation. 2. *Isopenthocrates japona* gen. et sp. nov.,  $\mathcal{J}$ , holotype. 3. *Penthocrates* sp.,  $\mathcal{J}$ , after Holloway *et al.* (1987).

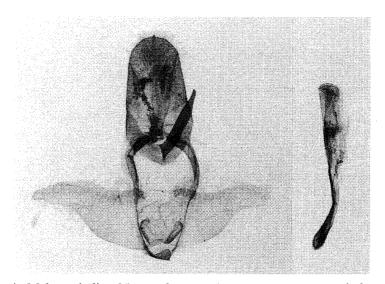


Fig. 4. Male genitalia of *Isopenthocrates japona* gen. et sp. nov., holotype.

CuA<sub>2</sub> weakly curved beyond middle.

Male genitalia (Fig. 4). Uncus large, its tip roundish; gnathos simple; valva wide-based, apical part gradually narrowed and ending in a roundish tip; saccus short; juxta wide, with its caudal margin widely excised. Aedeagus slender.

Remarks. The reduction in the number of veins in this genus is very unusual in the family, but the new genus seems to be most related to *Penthocrates* in its small size, reduction in number of wing veins (Fig. 3) and the similar construction of the male genitalia (Holloway *et al.*, 1987). In the genitalia, this new genus is distinguishable from *Penthocrates* by the lack of a subbasal process on the costa of the valva.

Etymology. The generic name is derived from its similar appearance to Penthocrates.

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Gender is femine.

## Isopenthocrates japona sp. nov. (Fig. 1)

Male. Length of forewing 6 mm, expanse 11.5 mm. Head and thorax dark fuscous brown, tegula and patagium dark blackish brown. Forewing dark fuscous brown, with a thin and whitish postmedian line, which is incurved beyond cell, then excurved and angled at veins 5 (M<sub>2</sub>) and 3 (CuA<sub>1</sub>), and again incurved above vein 1 (A); cilia a little paler than the ground color in basal half and pale ocher in the outer half with a thin and white median line across them, and irregularly checkered with blackish brown in the outer half. Hindwing grayish brown, with the inner area suffused with dark blackish brown excepting a diffuse white median stria; cilia pale brown in the basal half and pale ocher in the outer half with pale and diffuse basal and median lines excepting for the inner area, where they are blackish fuscous brown with white basal and double median lines.

Venation and genitalia as for the genus.

Holotype.  $\mathcal{J}$ , Japan, Mie Pref., Taki-gun, Miyakawa-mura, Yamatodani, Aug. 19, 1988, T. Mano leg., will be preserved in the collection of Laboratory of Insect Systematics, National Institute of Agro-Environmental Sciences, Tsukuba.

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### Reference

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#### 摘 要

日本産イラガの新属新種(吉本 浩)

1988 年 8 月, 本会会員の間野隆裕氏によって極めて特異な小型のイラガの3 1 頭が三重県宮川村で採集された. その外観はスンダランドからフィリピンにかけて分布する Penthocrates Meyrick, 1934 にやや似るが, 前後翅の脈相や交尾器の形態は同属と一致しないため, 新属新種 Isopenthocrates japona gen. et sp. nov., トビスジイラガ (新称), として記載した.

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